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Geotechnical Challenges in a Changing Environment

PROCEEDINGS

Edited by
Johannes Pistrol
Dietmar Adam
Helmut F. Schweiger

Austrian Geotechnical Society

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14 – 19 June 2026
Vienna, Austria

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Preface

The 21st International Conference on Soil Mechanics and Geotechnical Engineering (21 ICSMGE 2026) in Vienna, Austria, from 14 to 19 June 2026 is dedicated to the 100th anniversary of the birth of modern soil mechanics. The publication of Karl Terzaghi's groundbreaking book 'Erdbaumechanik auf bodenmechanischer Grundlage' ('Soil mechanics based on soil physics') in Vienna in 1925 offered a completely new perspective on the mechanisms and processes that characterise soil behaviour. Novel and innovative laboratory testing equipment and the mathematical formulation of mechanical processes in the soil revolutionised soil mechanics and geotechnical engineering. Consequently, it was not surprising that the first institute dedicated to this field, founded in 1928 at the 'Technische Hochschule Wien' (now TU Wien), had a reputation as the 'Mecca of Soil Mechanics' in the 1930s.

Karl Terzaghi, together with Arthur Casagrande, then played a key role in the founding of the International Society for Soil Mechanics and Foundation Engineering (ISSMFE) in 1936, which had its origins in the 1st International Conference on Soil Mechanics and Foundation Engineering held in Harvard, USA, in 1936. A total of 206 delegates attended from 20 countries. An Executive Committee was set up with Terzaghi as President and Casagrande as Secretary to ensure continuation of this very successful initiative.

After 90 years, the ISSMGE returns to Vienna, to host the 21st edition of this international conference series. For the first time, more than 2,000 participants attended the conference, a sign that interest in professional exchange among experts in the field is strong. The conference theme, 'Geotechnical Challenges in a Changing Environment', reflects current developments around the globe such as social transition, climate change, artificial intelligence, etc., which have an undeniable impact on the field. The topics covered by the conference represent a mix of traditional themes and innovative topics, aligned with the Technical Committees of the ISSMGE. A total of 2,250 abstracts were submitted and underwent a review process with the involvement of the 91 National Societies of the ISSMGE. The proceedings contain 1,257 papers covering a wide variety of geotechnical issues.

The scope and diversity are reflected in the Terzaghi Oration and Special Lectures, State-of-the-Art Lectures, Invited Lectures, and TC Honour Lectures, as well as in the numerous presentations selected by the Technical Committees for parallel sessions and workshops. A session is dedicated to the contractors. More than 100 companies showcase their products and services at the exhibition. TC Meetings take place and young geotechnical engineers get together. The event features 'A Tribute to Karl Terzaghi', the presentation of the 'Heritage Time Capsule', and an Awards Ceremony accompanied by presentations. Guided tours of the new Vienna Terzaghi Archive at TU Wien, technical visits, concerts, the conference banquet, and a selection of activities for accompanying persons complement the programme.

We wish you all a successful conference, inspiring discussions, and a wonderful opportunity to connect with colleagues and experts. Welcome to Vienna, enjoy your stay and experience the true spirit of our motto: *'Join us... where it all began'*.

Helmut F. Schweiger	Dietmar Adam	Johannes Pistrol
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